

Hurricane Harvey-Texas
ESF-10
Situation Report #6

Subject: SITREP #6
To: Agency Leads
Thru: Matthew Loesel. PSC
From: Unified Command
Date: 9/4/2017
Reporting Period: 9/4/2017

1. Introduction

1.1. Background

Hurricane Harvey made landfall at 2300 ET, August 26th, as a Category 4 storm near Rockport, Texas. Harvey stalled over southeastern TX. Due to its slow motion and a prolonged period of onshore flow, the impacted areas received more than 50 inches of precipitation which subsequently led to catastrophic flooding.

An ESF-10 Mission Assignment was signed on August 28, 2017. The US Environmental Protection Agency (EPA), Texas Commission on the Environmental Quality (TCEQ), Texas General Land Office (TGLO) and the US Coast Guard (USCG) have entered into Unified Command to begin the evaluation, clean-up and recovery of spills, releases and orphan containers.

2. Current Activities

2.1. Operations Section

On September 4, 2017, the Unified Command continued operations in accordance with the Natural Disaster Operational Workgroup (NDOW) Standard Operating Procedures, NDOW forms and Response Manager. The Unified Command is supported by three operational branches: Alpha Branch in Corpus Christi, Bravo Branch in Houston and Charlie Branch in Port Arthur. Several additional Oil Recovery and Container Recovery teams were added throughout Alpha, Bravo and Charlie Branches. The Charlie Branch is currently operating with five Oil Discharge Assessment Teams.

Table 1 displays the teams which were deployed in Alpha, Bravo and Charlie Branches during this operational period:

| Table 1: Quantity and Types of Teams Deployed 9/4/17 | | | |
|---|---------------------|---------------------|-----------------------|
| Team Type | Alpha Branch | Bravo Branch | Charlie Branch |
| Water Assessment Teams | 1 | 10 | 0 |
| Hazard Evaluation | 1 | 21 | 3 |
| Oil Discharge Assessment | 2 | 3 | 0 |
| Container Recovery | 2 | 0 | 0 |
| Oil Recovery Group | 3 | 0 | 0 |
| ER/Recovery Group | 3 | 1 | 0 |
| Arkema Group | 0 | 1 | 0 |
| Air Operations Group | 0 | 2 | 0 |
| Totals | 9 | 38 | 8 |

Bravo Branch completed site assessments at both public water systems and wastewater treatment facilities.

Drinking Water and Waste Water

| Table 2: PWS & WW | | # of Facilities Assessed | | |
|------------------------------|--|---------------------------------------|--|--------------------------|
| Status | Status Detail | <u>Alpha</u> <u>9/4/17</u> | <u>*Bravo</u> <u>9/3/17</u> | <u>Cumulative</u> |
| OK | No problems | 0 | 7 | 13 |
| CLEAR | Lifted BWN due to negative BacT samples. Normal operations resumed | 0 | 0 | 4 |
| DESTROYED | System destroyed | 0 | 0 | 0 |
| GENOK | On generator – never lost pressure | 0 | 0 | 5 |
| GENLP | On generator – lost pressure | 2 | 0 | 11 |
| LP/LT | Lost pressure & or Treatment | 1 | 2 | 8 |
| RESULTS | BacT sample results pending | 0 | 2 | 4 |
| LEOK | Lost Power – maintaining pressure | 0 | 0 | 1 |
| INOP | Not Operating | 0 | 0 | 8 |
| SITE | Site visit needed | 0 | 3 | 3 |
| OUT | Out of Contact | 0 | 3 | 4 |
| UNKNOWN | Contact Pending | 0 | 2 | 3 |

***Bravo branch assessment data is currently one day behind due to data entry lag.**

The phone bank in Austin, consisting of EPA and TCEQ personnel continue contacting drinking water and waste water facilities by phone.

| Table 3: Drinking Water Facilities Contacted and Total Status | | | |
|--|--|---------------------------------------|--------------------------|
| <u>Status</u> | <u>Phone Bank</u> | <u># of Contacts on 9/4/17</u> | <u>Cumulative</u> |
| OK | No problems | 132 | 2316 |
| CLEAR | Lifted BWN due to negative BacT samples. Normal operations resumed | 9 | 134 |
| DESTROYED | System destroyed | 1 | 5 |
| GENOK | On generator – never lost pressure | 1 | 51 |
| GENLP | On generator – lost pressure | 7 | 63 |
| LP/LT | Lost pressure & or Treatment | 11 | 80 |
| RESULTS | BacT sample results pending | 12 | 103 |
| LEOK | Lost Power – maintaining pressure | 1 | 7 |
| INOP | Not Operating | 10 | 211 |
| SITE | Site visit needed | 1 | 16 |
| OUT | Out of Contact | 47 | 406 |
| UNKNOWN | Contact Pending | 54 | 317 |

***Cumulative means the total number of calls with the corresponding status.**

| Table 4: Waste Water Facilities Contacted and Total Status | | | |
|---|--|---------------------------------------|--------------------------|
| <u>Status</u> | <u>Phone Bank</u> | <u># of Contacts on 9/4/17</u> | <u>Cumulative</u> |
| OK | No Problems | 44 | 2014 |
| DES | System Destroyed | 0 | 2 |
| OpGen | WWTP and/or Collection on Generator or bypass pumps for LS | 7 | 60 |
| Pop | WWTP and/or Collection Partially Operational SSO | 16 | 78 |
| NonOp | WWTP and/or Collection non-operational no SSO | 10 | 79 |
| SITE | Site Visit Needed | 0 | 1 |
| OUT | Out of Contact - phone evaluation only | 11 | 66 |
| UNKNOWN | Contact Pending - Phone evaluation only | 34 | 336 |

***Cumulative counts the total number of calls made with the corresponding Status.**

| Table 5: Daily/Cumulative summary of Hazard Evaluations/Recovery | | | | |
|---|-----------------|-------------------|-----------------|-------------------|
| Status | Opened | | Closed | |
| | 9/4/2017 | Cumulative | 9/4/2017 | Cumulative |
| Alpha Branch | 3 | 46 | 8 | 58 |
| Bravo Branch | 33 | 127 | 5 | 15 |
| NRC Reports | 0 | 3 | 0 | 0 |

Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.

| Table 6: Daily/Cumulative Summary of Spills/Discharges | | | | |
|---|-----------------|-------------------|-----------------|-------------------|
| Status | Opened | | Closed | |
| | 9/4/2017 | Cumulative | 9/4/2017 | Cumulative |
| Alpha Branch | 12 | 351 | 4 | 32 |
| Bravo Branch | 7 | 37 | 3 | 6 |
| NRC Reports | 6 | 27 | 8 | 15 |

Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.

Other Notable Activities

AUSTIN BRANCH

The phone bank contacted phone surveys almost all assigned drinking water and wastewater facilities to conduct an initial damage assessment. They have completed applicable survey forms for each water or wastewater system and entered the data into Response Manger. They continue to coordinate with TCEQ.

ALPHA BRANCH

Alpha Branch personnel completed pre-sampling and fencing on the two staging pads. The pads are located in Port Aransas and Aransas Pass. Teams recovered an additional seven drums and three cylinders. In the city of Rockport, a team assessed an elevated tank. City engineers recommended that the city drain the tank and disassemble it due to strut damage. In Holiday Beach, a team met with the water system operator and board members to discuss concerns and issues. The water system operator stated that more parts are needed for repairs of the distribution but all current leaks have been fixed.

An additional skid steer and boat was mobilized to geographic areas in Alpha Branch. Personnel continue reviewing the backlog list of NRC reports compared to Response Manager target.

Orphan Container Recovery Teams in Alpha Branch continued reviewing open targets. Dialog with the data team and branch director on the system to close out open facility spill assessment targets continued. New and existing NRC Reports were reviewed for response candidates. Contact was initiated with Port Aransas WWTP regarding disposal of non-hazardous wastewater. Conoco Phillips was contacted regarding NRC report 1188749 to get an update. The report indicated the potential for a large spill but nothing has developed.

- A total of 86 orphan containers have been collected at the Alpha Branch staging area.

| DATE | CONTAINERS | | | Cylinders | TOTALS | |
|----------|------------------|----------------------------------|----------------------------------|-----------|--------------------------------|---|
| | Drums [55gal] | Small Containers [< 55gal] | Large Containers [> 55gal] | | Total Items Collected Today | Total Items Collected Project to Date |
| 9/1/2017 | 26 | 22 | 1 | 1 | 49 | 49 |
| 9/2/2017 | 6 | 10 | 1 | | 17 | 66 |
| 9/3/2017 | 7 | | | 3 | 7 | 73 |
| 9/4/2017 | 10 | | 3 | 1 | 13 | 86 |

- On Monday September 4, 2017 at 0900, EPA and the USCG provided oversight operations at Aransas Pass. The Oil Discharge Assessment Group (ODA) 1 continued to monitor oil removal operations on the Signet Enterprise. The Signet Enterprise commenced removal operations on the second FRAK truck. The second FRAK truck has approximately 25,000 gallons of diesel onboard. Thus far, 20,000 gallons of diesel has been removed and 280,000 gallons remains.
- On Monday September 4, 2017 at 1019 in Port Aransas, the ODA 1 monitored the Drill Ship DPSPDS1 as it was successfully free floated with no issues or pollution observed. The Drill Ship DPSPDS1 is currently en-route to Sherwin Alumina dock.
- The Alpha Branch's Hazard Evaluation transitioned from two teams to one team. The Oil Discharge Assessment Group transitioned from three teams to two teams. The Oil Discharge Recovery Group transitioned from two teams to three.
- Recovered 10 drums, 3 tanks greater than 55 gallons, and 1 cylinder closing a total of 7 targets from Response Manager (ERRS, EPA, TCEQ)

- Continued oversight of fuel transfers of Signet Enterprise- 20, 000 gallons to date (USCG and TGLO)
- TCEQ operations were turned back over to TCEQ regional office

BRAVO BRANCH

- Bravo Branch Houston is operational with Warren Zehner and Matt Tilimon as Deputy. Approximately 80 responders reported to the operations briefing.
- During this operational period, Hazard Evaluation Teams (20) conducted assessments in Lincoln County and Chamber County. Identified 40 targets. HE Assessment Status: 90% complete in Lincoln County, Chamber County 30%, Austin 10%. All other counties in Branch Bravo 0%.
- Air Recon conducted aerial overflight of Austin County and Colorado County to assess flooding extent and pollution. Identified 7 targets.
- Discharge Monitoring Teams (3). DA 3 oversaw fuel transfer. 10 facilities discharge targets closed out.
- Two USCG Liaison Officers and Planning personnel include EPA and EPA START have integrated into the Bravo Branch.
- ARKEMA: Unified Command agreed precautionary plan to introduce a temporary cooling option to protect the ambient temperature organic peroxide within Arkema's building 21 was completed at 1530. At this time 4 tons of dry ice placed inside the bays storing the peroxide within the building is most practical and efficient approach. The material does not pose an imminent threat of decomposing but as a precaution and in concurrence with UC the RP proceeded with the temporary cooling option. The UC has stood down and demobed from the operations center. The Harris County Health Department and the Harris County Pollution Control and coordinating with Arkema any health inquiries that could come from the nearby community.
- During this operational period ASPECT conducted flights to Chambers County, Warton County, and Matagorda County. In Chambers County ASPECT photographed the remaining RNA targets (approximately 15) and then proceeded to RNA targets in Matagorda and Wharton Counties (approximately 110 targets). There were no chemical detections. ASPECT's reach back team is consolidating all positive chemical detections from all flights and preparing tabular and geospatial products for the Region.

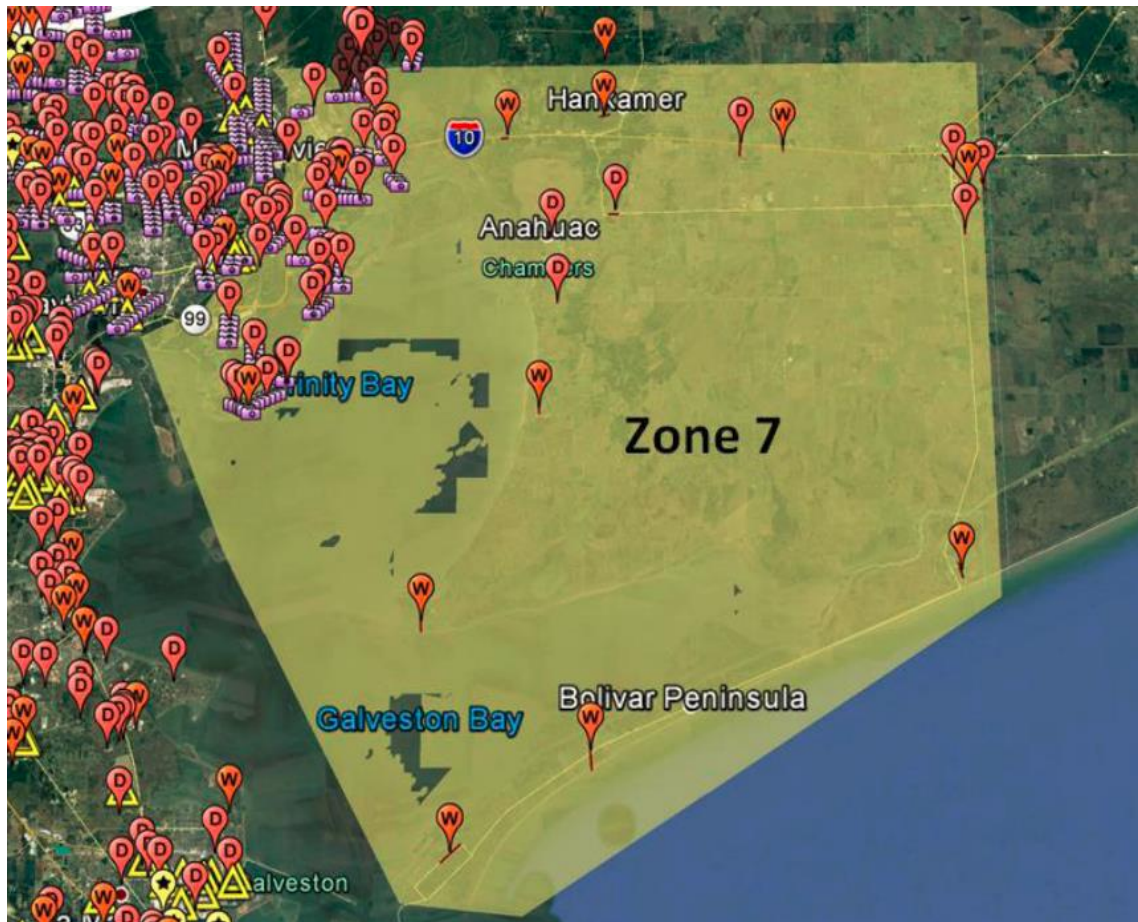


FIGURE 1: Zone 7 (Chambers County) Rapid Needs Assessment targets (>15 remaining targets, 15 flight lines). "D" represents drinking water facilities," W" represents wastewater treatment facilities.

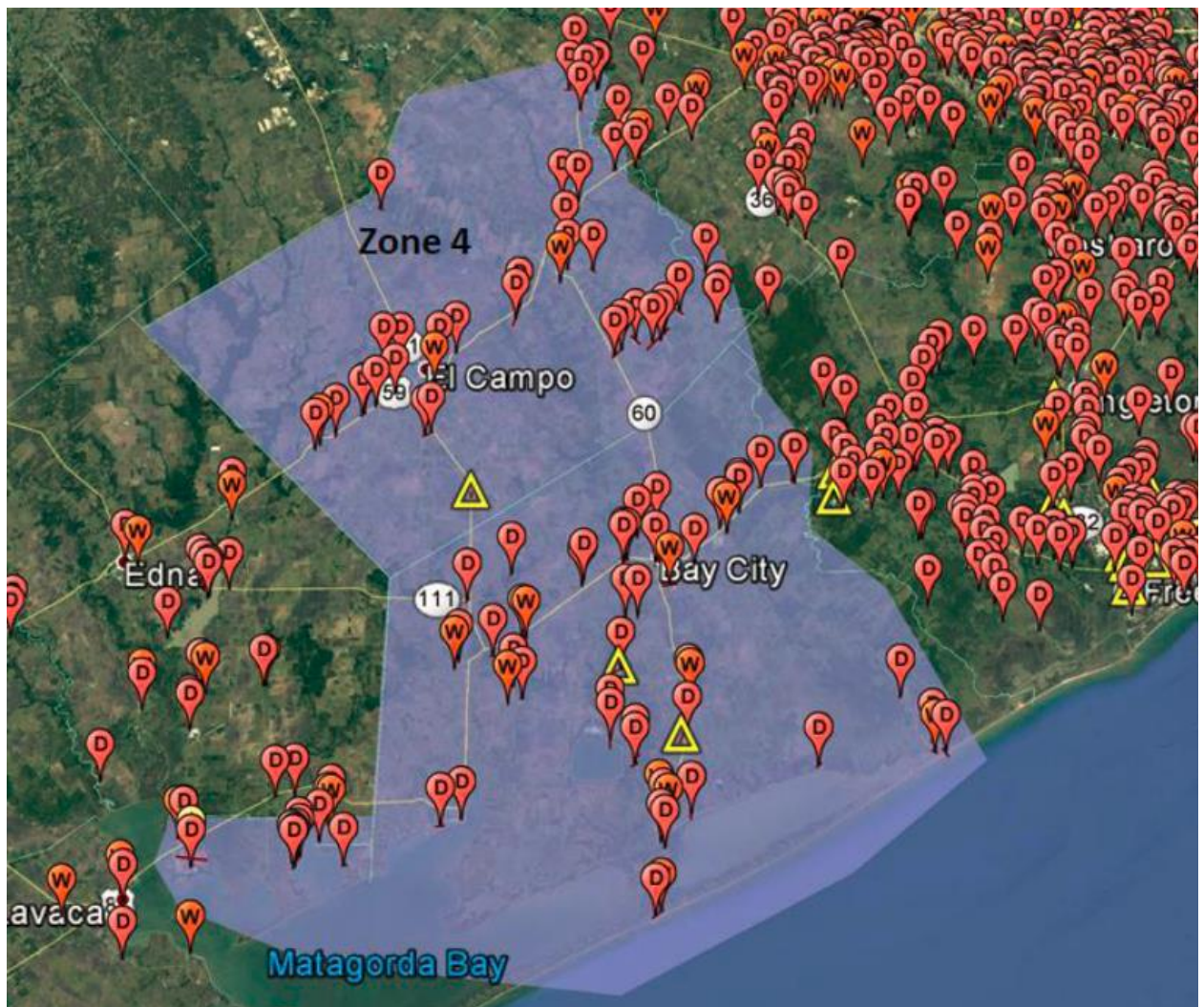


Figure 2: Zone 4 (Matagorda and Wharton Counties) Rapid Needs Assessment targets (>110 remaining targets, 85 flight lines). “D” represents drinking water facilities,” W” represents wastewater treatment facilities, and yellow triangle represent risk management plan sites.

CHARLIE BRANCH

- EPA has secured an operational staging area in the parking lot of the Central Mall, adjacent to the U.S. Coast Guard (USCG) Marine Safety Unit (MSU) in Port Arthur. Two EPA OSCs are mobilizing from Houston along with GIS/Data Support. Currently, most of the area is still inaccessible due to flooding. EPA will continue to coordinate with local, state and federal response partners to plan for further assessment and potential response actions once the flood waters recede. The priority for the next operational period is to set up command posts with work space and continue developing an operational structure to begin field operations.

- During this operational period, the Charlie branch's Hazard Evaluation teams assessed the Neches Park, Sabine Pass, and Sabine. High water prevents ground ops at this time. The 2nd Hazard Evaluation team visited Motiva. Motiva has no power and is shut down. This team also contacted and confirmed that the Colonial Pipeline is still non-operational.
- Teams conducted assessments and identified over 10 targets for reassessment.

3. Participating Agencies

- Texas Commission on Environmental Quality
- Texas General Land Office
- Texas Parks and Wildlife
- 6th Civil Support Team
- US Environmental Protection Agency
- US Coast Guard
- National Oceanic and Atmospheric Agency

4. Personnel on Site

| Agency | ICP | Alpha Branch | Bravo Branch | Charlie Branch* | Austin |
|-------------|-----|--------------|--------------|-----------------|--------|
| US EPA | 15 | 2 | 16 | 3 | 10 |
| USCG | 9 | 22 | 30 | 1 | 1 |
| TCEQ | 2 | 5 | 31 | | |
| TGLO | 6 | 2 | 4 | | |
| CST | 8 | 9 | | | |
| Contractors | 11 | 6 | 5 | | |

*Charlie Branch is continuing the process of being staffed.

